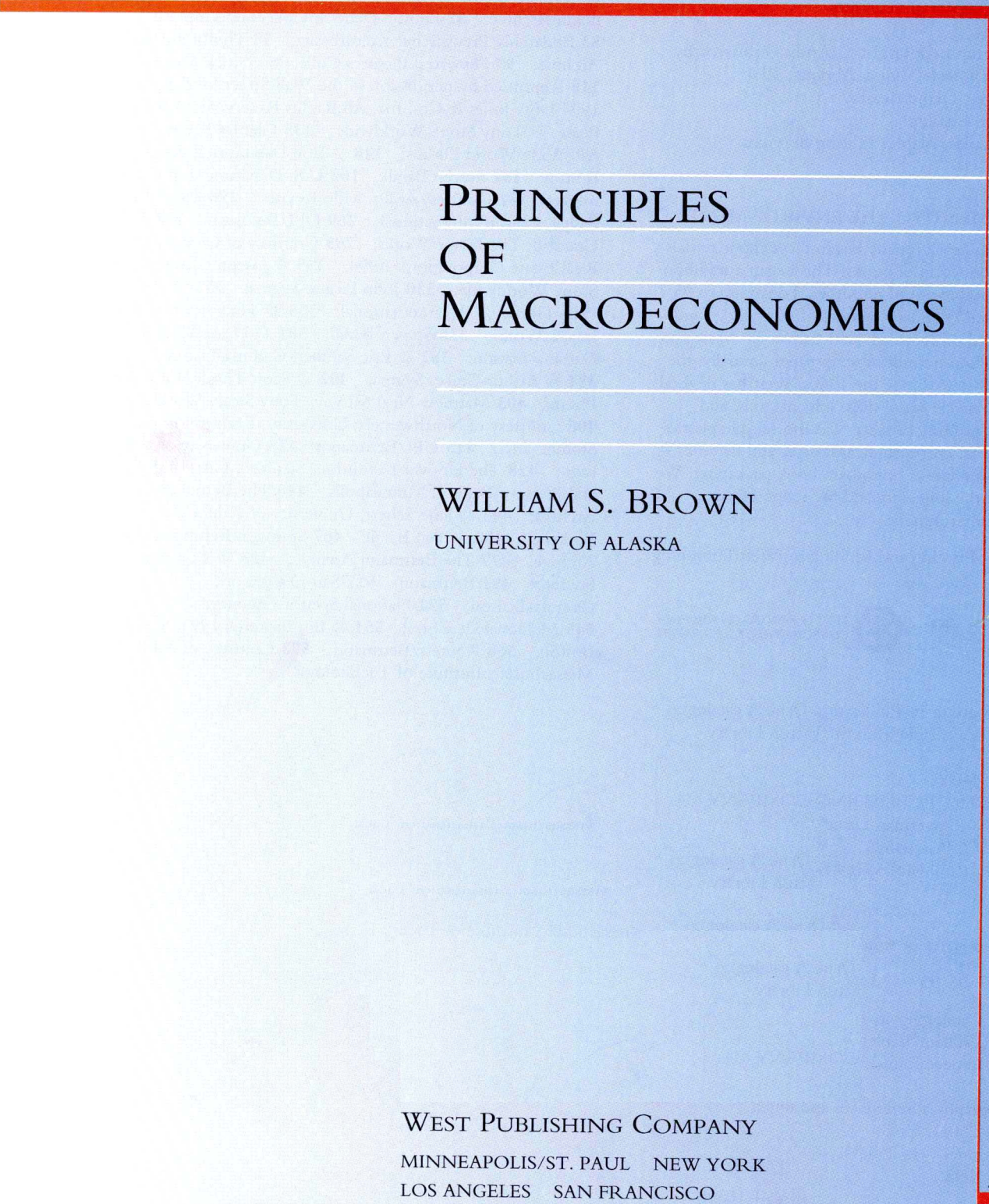


PRINCIPLES OF  
**MACROECONOMICS**

WILLIAM S. BROWN





# PRINCIPLES OF MACROECONOMICS

WILLIAM S. BROWN  
UNIVERSITY OF ALASKA

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## PREFACE

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*“The only reason, the only excuse, for the study of economic theory is to make this world a better place in which to live.”*

*Wesley Clair Mitchell (1874–1948)*

The past 20 years have been marked by dramatic economic change, and there is no hint that this trend is about to end. For example:

- There has been a massive shift of labor from manufacturing into the service industries. In 1970, over a third of all workers were employed in goods-producing industries; today, the proportion is barely a fifth. Some service industry jobs are high paying, but many are not.
- The mass-production factory system is becoming a thing of the past as production methods become more specialized. One implication of this change is that most new jobs are being created by small businesses. Another implication is that many large corporations are laying off workers in an effort to become more efficient.
- Few firms can ignore international competition, and some firms have met the challenge of low-cost imported goods by moving their production facilities abroad. One consequence is job loss with downward pressure on wages for many workers. Another consequence is that policymakers must take the threat of industrial relocation seriously: without tax incentives, firms may relocate in a different state or even abroad.
- The collapse of the Soviet Union means that the traditional debate between capitalism and socialism is largely irrelevant. The problem today is to find the best transition path from socialism to capitalism—and the best variety of capitalism.

The pervasiveness of change and evolution means that it is not sufficient to learn a particular body of economic theory and set of economic facts, because the facts are constantly changing. Some economic models that performed well in the past may not work well today or tomorrow. Economists do not and cannot have answers to all of the questions because new questions crop up every day. Students must be aware of this, and they must be ready and able to compare different explanations for economic phenomena. To give students the idea that economics has reached its pinnacle of theoretical development is less than honest. It is also a quick way to assure that students lose interest in economics: students will find economics more relevant when they are taught that it is evolving with the world around them.

It is this emphasis on economic change and evolution that distinguishes *Principles of Macroeconomics* from other principles books on the market. Virtually every idea is presented in historical context and with reference to alternative theories. For example, Adam Smith’s *Wealth of Nations* is described in Chapter 1 as a response to the social changes of the 1700s, not merely as the first statement of the allocative power of self-



correcting markets. Likewise, the discussion of Keynesian macroeconomics in Chapter 8 sets out the historical context—its relevance to Say's law and the Great Depression—before introducing the multiplier, equilibrium GDP, and so on. Contemporary developments in economic theory are also discussed in evolutionary context. For example, Chapter 18 presents the new growth theory as a consequence of the failure of standard growth models to account for the productivity crisis of the 1970s and 1980s; and Chapter 22 introduces the new international economics as a synthesis between the microeconomics of imperfect competition and standard trade theory.

## • A FIRM FOUNDATION IN MAINSTREAM ANALYSIS

An understanding of the evolution of economic theory helps develop the ability to think critically, perhaps the most important skill in the economy of tomorrow. The evolutionary perspective means that we must suspend judgment and examine new and alternative views. But this does *not* mean that we can dismiss traditional economics. The law of comparative advantage, discovered early in the nineteenth century, has long been used to show that all countries can gain from the absence of tariffs and other trade restrictions. It is applicable even in this era of tariffs and regional trading blocs because it provides a framework for analysis and a norm for comparison. Without such a framework, it would be difficult to understand who will gain and who will lose from the North American Free Trade Agreement—or the next trading bloc to develop. The world is changing, and economics is changing along with it, but we are a long way from discarding the body of economic knowledge developed over the past two centuries.

It is the existence of a common core of knowledge that distinguishes economics from the other social sciences. This core forms the foundation for economic discussion and debate, and students without a solid understanding of that core are incapable of continuing their studies in economics. Still, scientific debate requires a spirit of pluralism—a point made emphatically in a plea to the economics profession signed by over 40 top economists and published in the May 1992 issue of the *American Economic Review*.<sup>1</sup> *Principles of Macroeconomics* provides a solid and rigorous foundation in that core, as well as the pluralism demanded of objective inquiry.

## • PEDAGOGICAL FEATURES

Like all introductory texts on the market, *Principles of Macroeconomics* includes chapter objectives, summaries, key terms, and end-of-chapter questions. Additionally, all graphs are captioned with self-contained explanations to avoid the page-flipping shuffle that is so frustrating to students, and key formulas are collected at the end of

<sup>1</sup>"A Plea for Pluralistic and Rigorous Economics," *American Economic Review* 82 (May 1992): xxv. Among the signers were Moses Abramovitz, Kenneth Boulding, Paul Davidson, Edward Denison, Clive W. J. Granger, and Paul Samuelson.



the chapter where they are introduced. Additional pedagogical features of *Principles of Macroeconomics* include:

- Periodic *Recap* features to help the student digest material in manageable blocks. Recaps list the key points that students should understand before proceeding to the next section. Most chapters have three to five Recaps.
- Extensive use of real data and real-world examples. Good examples are a key to learning. Too many books use contrived examples with little reference to the real economy. Students often finish the course thinking that economics is all about widgets! *Principles of Macroeconomics* contains a wealth of current data and puts it in perspective so that students will know why the numbers are *important*. For example, most national income data from the period 1930–1993 are included, and the NBER recession dates are marked when appropriate on figures. In the international chapters, students not only see what has happened to the current and capital account over the past decades, but they also discover who the United States' major trading partners are and what products the United States imports and exports. Specific nontariff barriers—for example, on kiwi and automobile imports—are discussed, and the unintended consequences of trade restrictions are illustrated with a case study on computer software export restrictions.
- Discussions of “popular economics” by well-known contemporary economic thinkers. For example, Paul Krugman's *Age of Diminished Expectations* is discussed in Chapters 5 and 18, and CEA Chair Laura D'Andrea Tyson's work in *Who's Bashing Whom* is analyzed in Chapter 22. We owe it to our students to provide a careful analysis of the kinds of issues that we believe are so important that we take time away from our research for popular writing. This is also the kind of economics that students are going to be exposed to in the media. Students need to be aware of this information—and be ready to understand the underlying economics.
- Extensive international coverage. Four entire chapters are devoted to international economics, and international issues are discussed in many other chapters as well. For example, relationship between fiscal and trade deficits is discussed in Chapter 11 and 22, and foreign industrial policies are examined in Chapter 18.
- *Focus On* boxes. Most chapters have one or two Focus On boxes that apply or extend chapter concepts to real-world problems. These discussions are set off in boxes to avoid interrupting the flow of the core material. Among the topics included in the Focus On boxes are Reading the Financial Pages (Chapter 5), Inventory Adjustment and Economic Forecasting (Chapter 9), Can We Have Another Great Depression? (Chapter 11), The Unemployment Insurance System (Chapter 12), Printing Money, Inflation, and the Deficit (Chapter 13), and The Role of Economists in the Former Soviet Union (Chapter 19).
- *Our Economic Heritage* biographies. Short biographies of famous economists are sprinkled throughout the text. Both historical figures (including Keynes and Veblen) and contemporary greats (including Akerlof and Tyson) are featured. These biographies not only highlight the economists' important contributions but explain how their personal experiences affected their interest in economics. Students who understand why economics is important to the masters will find it important to their own lives.



## • INNOVATIVE CHAPTERS

*Principles of Macroeconomics* covers the standard material and in a standard order, so most professors will need to make only minor revisions to their course outlines. In addition, several innovative chapters that reflect contemporary developments have been included. Among the more innovative chapters are:

- Chapter 17, “The Business Cycle and Contemporary Policy Debates.” All macro principles texts present policy debates, but most confine the analysis to a rather dated discussion of the Keynesians versus the monetarists or perhaps activists versus nonactivists. This chapter presents balanced views of three contemporary schools of thought: the new Keynesians, new classicals, and real business cycle theorists. The text notes how each school accounts for cycle fluctuations and analyzes alternative policy options. Neo-Keynesians and monetarists are discussed in the analysis of monetary policy in Chapter 15, and views of the post-Keynesians are touched on in Chapter 18.
- Chapter 18, “The Long Run: Growth and Productivity.” After a brief discussion of Christina Romer’s new economic history, this chapter provides a principles-level discussion of the neoclassical growth model, the social model of Bowles, et al., and Paul Romer’s new growth theory. It then examines policies designed to stimulate productivity growth, including Aschauer’s work on public infrastructure and the pros and cons of industrial policies.
- Chapter 19, “Evolving Economic Systems.” This chapter breaks away from the standard “capitalism versus socialism” approach to comparative systems to focus on the contemporary issue of economic transition in the former socialist states, eurosclerosis, and the varieties of capitalism.
- Chapter 22, “Policy in the Open Economy.” Most books treat tariffs in the international trade chapter and look at the advantages of fixed versus flexible exchange rates in the international finance chapter, but then say little more about international economic policies. This chapter explores the important issues of exchange rate target zones, regional trading blocs (including NAFTA and the European Union), policy coordination, and strategic trade policies.
- Chapter 23, “The Economics Degree.” Students often end the principles course asking, “So what?” This chapter supplies an answer: it provides the student with information on additional economics courses, career paths, and graduate school. It serves both as a capstone chapter and as an aid in the advising process.

## • ANCILLARIES

The following ancillaries are available for use with *Principles of Macroeconomics*:

- *Study Guide*. Written by Melissa Thomasson, University of Arizona, and Daniel Lee, Shippensburg University. This supplement is available in micro/macro splits as well as a combined volume.

Scrupulously coordinated with the text, each chapter of the manual presents overviews as well as a review of key concepts, graphs and equations. Essay, completion, multiple-choice and true/false questions are included with complete answers given. Each chapter affords extensive practice in graphical analysis and



construction. “Beyond the Basics” problems refer to a current article or reading which challenges the students’ skills in applying economic theory.

- *Instructor’s Manual*. Written by the author, William Brown, and Liz Hagen, University of Montana. This supplement offers chapter overviews, teaching suggestions and alternative examples. Complete answers to all end-of-chapter questions and problems are provided as well as additional essay and discussion questions.
- *Test Bank*. Written by William Shingleton of Indiana University Northwest and available as a manual and on WESTEST 3.0, a computerized testing program for DOS, Windows and Macintosh. The test bank contains over 4,000 multiple-choice and true/false items, all classified according to one of six categories: definition, theory, application, history/institutions, policy and table/calculation.
- *Transparency Acetates and Masters*. All of the graphs and art from the text are available as masters. Over 150 4-color acetates of key graphs and art from the text are also available to adopters.
- *Astound Presentation Software*. Astound presentation software is an electronic transparency package that enables an instructor to create and manipulate images for classroom display. A package of slides which consists of significant graphs and key figures from *Principles of Macroeconomics* accompany the software. The instructor may edit these slides or add to them as desirable.
- *West’s Video Library for Economics*. Critical thinking and thematic videos are available for classroom use that apply the concepts in this text. The videos, in particular, stress the global economy as well as other select topics such as the deficit and the natural environment. An instructor’s manual for the video library includes lecture notes on the videos.
- *Limited English Proficiency (LEP) Manual*. Written by Elaine Kirn, Language Arts Chair and ESL Specialist, West Los Angeles College, this manual is designed to help ESL/developmental students succeed in the course. Tied specifically to the foundational chapters (1–6), the LEP manual aids students in recognizing parts of speech, deriving meaning from context, as well as offering a number of techniques and exercises for analyzing the textbook.
- *West Graphing Software*. Interactive tutorial software is available to students which is specifically tied to the core micro and macro chapters of *Principles of Macroeconomics*. The package which works within Windows requires the student to create, modify and interact with key graphs.
- *The Economist’s Handbook*. Written by Thomas L. Wyrick of Southwest Missouri State University. This title is a paperback research and writing guide designed to help students in preparing term papers and reports. More than just a style and reference manual, the *Economist’s Handbook* also seeks to improve the students’ ability to think like an economist.

## TO THE STUDENT

*Principles of economics* is one of the most popular college courses in the United States—over a million students enroll in introductory economics courses every year. Many of these students take economics as a requirement. It is required for business degrees and most social science degrees, and it also serves as a liberal arts core requirement at many schools. If you are one of those students who is required



to take this course, take heart: thousands of students actually choose economics as an elective. They take economics for a simple reason: economics is important. It is indispensable for understanding the world around us. It is a way to think. It will help you understand the evening news. It will help you vote intelligently. It will help you make important career decisions. And if you do go into business when you graduate, you will find that economic reasoning is mandatory every day.

Now back up a moment and re-read the previous paragraph. It said that many college students take economics classes. It said that economics would help you vote and solve problems—but it said *nothing about the factual content of economics*. This isn't an oversight; the factual content of economics changes! You do need to know some economic facts, but the most important thing to learn from an economics class is how to *think* like an economist. Thinking like an economist will help you see why economic issues are important—how they affect your job prospects, the value of your savings, and your future. It will teach you that everything valuable involves a choice and that alternative decisions always have costs and benefits. It will teach you how to think logically and how to use economic reasoning on a daily basis.

## • • • AND FINALLY . . .

Writing a textbook isn't as difficult as it is demanding. It requires three or four years of intense discipline: put it down for just a week, and you'll inevitably discover that you'll spend another week just finding out where you were. That said, writing *Principles of Macroeconomics* was a pleasure in one important sense: it was a joy to know that it will provide students with their first exposure to something as exciting—and important—as economics.

My debts are many. I could not have written this book without the help and encouragement of my editor, Bob Horan. Bob had the faith that I could write a successful book, and he kept pushing me to write the best book that I could. Bob and I worked closely with the developmental editor, Janine Wilson, and the production editor, Stacy Lenzen. Janine and Stacy turned an unruly manuscript into the stunningly beautiful book you are holding.

*Principles of Macroeconomics* has been class tested for three years at the University of Alaska, and I thank my students who put up with far too many typos and other problems inherent in working from a living document. I listened to and learned from all of my students' comments and suggestions, but want to single out two for their special contributions, Marco Castaneda and Larry Hurlock. Finally, West Publishing is to be commended for finding the resources to subject the first edition of this book to nearly 100 reviewers, many of whom looked at several portions of the manuscript as it went through three complete drafts. I incorporated as many of the reviewers' ideas as possible and was amazed at the diligence that most reviewers put into their reviews. The reviewers were:

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The real cost of any project of this magnitude is time. Not only time away from friends and family as I hibernated upstairs in front of my computer, but the times when my economic ruminations made it impossible for me to stop thinking economics even while I made the pretense of socializing. My wife Rhonda incurred every bit as much of these costs as I did. This book is dedicated to her.

*William S. Brown*  
*jwsb@acad1.alaska.edu*  
*Juneau, Alaska*  
*September 1994*



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## ABOUT THE AUTHOR

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WILLIAM S. BROWN received his undergraduate degree from Texas Christian University in 1971 and his Ph.D. from the University of Colorado in 1977. His main research interests are policy issues, macroeconomics, and the economic transition of the former socialist economies. He is the author of numerous journal articles and two previous texts, *Macroeconomics* (Prentice-Hall, 1988) and *Introducing Econometrics* (West, 1991). Professor Brown has taught at several universities and has twice been cited for his teaching excellence. In his spare time, Bill enjoys salmon fishing, backpacking, and gourmet cooking. He lives in Juneau, Alaska, with his wife Rhonda and their Siamese cat Max. Their home, surrounded by 200-foot-high trees, is within jogging distance of the Mendenhall Glacier. Only occasionally do bears wander into the backyard.



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